REMARKS

Claims 1-6, 8-15, 17-23, 25 and 26 are pending in the application. Claims 1-6, 8-15, 17-23, 25 and 26 have been rejected.

Claims 1-5, 8-11, 13-15, 17-22 and 25-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Man, U.S. Patent No. 5,710,908 (Man) in view of Glass, U.S. Patent No. 6,519,653 (Glass). This rejection is respectfully traversed.

The present invention generally relates to a communication infrastructure that allows application programs within a software system to dynamically use services, such as receiving an transmitting messages, through a common application program interface (API). The communication infrastructure allows the specific communication schemes that are being used to be isolated from the application programs such that the application programs are not dependent upon a particular communication scheme.

More specifically, the present invention, as set forth by independent claim 1, relates to a method which includes obtaining a message from a first component of a software system, identifying a module to handle scheme-specific communication of the message and using the module for communicating the message from the first component to a second component of the software system. The message communicating includes using a first resource locator to identify the first component and using a second resource locator to identify the second component. The first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name indication portion, a first resource locator port identifier indication portion and a first resource locator path indication portion. The second resource locator includes a second resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion.

The present invention, as set forth by independent claim 10, relates to a software system which includes a common interface to communicate between a first component of a software system and a second component of the software system, a communication scheme handler to identify a module to handle scheme-specific communication between the first component and the

second component, a first resource locator for the first component and a second resource locator for the second component. The first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name indication portion, a first resource locator port identifier indication portion and a first resource locator path indication portion. The second resource locator including a second resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion.

The present invention, as set forth by independent claim 18, relates to a computer program product which includes obtaining instructions to obtain a message from a first component of a software system, identifying instructions to identify a module to handle scheme-specific communication of the message, using instructions to use the module to communicate the message from the first component to a second component of the software system, and a computer-readable medium to store the obtaining instructions, the identifying instructions and the using instructions. The using instructions include resource locator instructions to use a first resource locator to identify the first component and to use a second resource locator to identify the second component. The first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name indication portion, a first resource locator port identifier indication portion and a first resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator network node name indication portion, a second resource locator network node name indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion.

Man relates to a method of transmitting data between application programs independent of any specific protocol. More specifically, Man discloses a protocol independent method of transmitting a data packet from a first application program executing on a first device which is interfaced to a LAN to a second application program executing on a second device which is interfaced to the LAN. A protocol independent interface (PII) program is initialized which determines which protocols are available for use, assigns an access line to each protocol that is available for use, assigns an access ID to the first application program, and creates mapping

information that indicates a one-to-one correspondence between an access ID/access line pair and a block of protocol specific information which includes a protocol header having predetermined address data. A data packet is sent to the PII program together with the access ID of the first application program and a destination ID for the second application program, and one of the available protocols is selected to transmit the data packet. A block of protocol specific information is retrieved from the mapping information based on the access ID of the first application program and the access line corresponding to the selected protocol, and a transmission packet is formed which includes the data packet, the destination ID, and the retrieved block of protocol specific information. The transmission packet is then transmitted via the LAN.

The Examiner cites to the following portion of Man when setting forth that Man discloses using an identifier to identify a first component and using an identifier to identify a second component:

A data packet is sent to the PII program together with the access ID of the first application program, and one of the available protocols is selected to transmit the data packet. (Man, Col. 2, lines 33 - 37.)

Additionally, when discussing Man, the Examiner has set forth:

Man does not explicitly indicate that the identifiers are resource locators including a resources locator network node name indication portion, a resource port identifier indication portion, and a resource locator path indication portion.

Glass teaches a system of sending messages from a first application to a second where the identifier of the source and destination include resource locator network node name indication portion, a resource port identifier indication portion and a resource locator path indication portion (Office action dated January 11, 2007, Page 3).

The portions of Glass to which the Examiner refers sets forth:

A conventional URL (uniform resource locator) syntax may also be used to refer to the object. For example, the new remote object with alias "Store1" is located at a remote host or IP address of "dallas" at port number "8000" with the above construction syntax. (Glass, Col. 4, lines 4-8.).

The Java class, its virtual class, and virtual object/agent 100 reside in a first host address and port number 102 (ALPHA:4000). A reference 104 is constructed that refers to the

host address and port number (BETA:8000) and alias (Store1) of the new remote agent to be constructed (Glass, Col. 4, lines 22 - 26).

However, neither of these portions of Glass, nor anywhere else in Glass is there any teaching or suggestion of communicating a message from the first component to a second component where the communicating includes using a first resource locator to identify the first component and using a second resource locator to identify the second component much less such communicating where the first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name indication portion, a first resource locator port identifier indication portion and a first resource locator path indication portion and the second resource locator includes a second resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion, as required by claims 1, 10 and 18. These deficiencies of Glass are not cured by Man.

More specifically, Man and Glass, taken alone or in combination, do not teach or suggest a method which includes communicating a message from a first component to a second component where the message communicating includes using a first resource locator to identify the first component and using a second resource locator to identify the second component, much less where the first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name indication portion, a first resource locator port identifier indication portion and a first resource locator path indication portion; and the second resource locator includes a second resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion, all as required by claim 1. Accordingly, claim 1 is allowable over Man and Glass. Claims 2 - 9 depend from claim 1 and are allowable for at least this reason.

Additionally, Man and Glass, taken alone or in combination, do not teach or suggest a software system which includes a first resource locator for a first component and a second resource locator for a second component where the first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name

indication portion, a first resource locator port identifier indication portion and a first resource locator path indication portion and the second resource locator includes a second resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion, all as required by claim 10. Accordingly, claim 10 is allowable over Man and Glass. Claims 11 - 17 depend from claim 10 and are allowable for at least this reason.

Additionally, Man and Glass, taken alone or in combination, do not teach or suggest a computer program product which includes using instructions to use a module to communicate the message from a first component to a second component of the software system where the using instructions include resource locator instructions to use a first resource locator to identify the first component and to use a second resource locator to identify the second component; and wherein the first resource locator includes a first resource locator communication scheme indication portion, a first resource locator network node name indication portion, a first resource locator port identifier indication portion and a first resource locator path indication portion and the second resource locator includes a second resource locator communication scheme indication portion, a second resource locator network node name indication portion, a second resource locator port identifier indication portion and a second resource locator path indication portion, all as required by claim 18. Accordingly, claim 18 is allowable over Man and Glass. Claims 19 - 26 depend from claim 18 and are allowable for at least this reason.

CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned.

The Commissioner is authorized to deduct any additional fees which may be necessary and to credit any overpayment to Deposit Account No. 01-0365.

I hereby certify that this correspondence is being electronically submitted to the COMMISSIONER FOR PATENTS via EFS on April 3, 2007.

/Stephen A. Terrile/
Attorney for Applicant(s)

Respectfully submitted,

/Stephen A. Terrile/

Stephen A. Terrile Attorney for Applicant(s) Reg. No. 32,946